

SHABAROV, Yu.S.; LEVINA, R.Ya.; POTAPOV, V.K.

Cyclopropanes and cyclobutanes. Part 25: Interaction of
phenylcyclopropane with pyridine sulfotrioxide.
Zhur.ob.khim. 32 no.10:3184-3188 O '62. (MIRA 15:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Benzene)
(Pyridinesulfonic acid)

LEVINA, R. Ya.; SHANAZAROV, K. S.; TRESHCHOVA, Ye. G.; KOSTIN, V. N.

Synthesis of hydrocarbons. Part 79: Synthesis of stereoisomeric
1,3-dimethyl-5-alkylbicyclo(0,1,3)hexanes and their Raman
spectra. Zhur. ob. khim. 32 no.12:3935-3941 D '62.
(MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

(Bicyclohexane—Spectra)

LEVINA, R.Ya.; KORZHENEVICH, S.Ya. (Moskva)

Case of lymphogranulomatosis in combination with hypernephroma.
Klin.med. 40 no.6:108-109 Je '62. (MIRA 15:9)

1. Iz gorodskoy bol'nitsy No.63 Dzerzhinskogo rayona Moskv
(glavnyy vrach Ye.I. Shepet).
(HODCKIN'S DISEASE) (KIDNEYS—TUMORS)

SKVARCHENKO, V.R.; PUCHNOVA, V.A.; LEVINA, R.Ya.

Aromatic hydrocarbons. New synthesis of anthracenes. Dokl.AN
SSSR 145 no.4:831-833 Ag '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom A.N.Nesmeyanovym.
(Anthracene)

SHUSHERINA, N.P.; DIMITRIYEVA, N.D.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Chloromethylation of 2-pyrone. Dokl.
AN SSSR 146 no.5:1113-1116 0 '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom A.N.Nesmeyanovym.
(Pyrone) (Chloromethylation)

SKVARCHENKO, V.R.; TSYBIROVA, D.TS.; LEVINA, R.Ya.

Aromatic hydrocarbons. Part 25: New synthesis of diphenyls. Zhur.-
ob.khim. 32 no.6:1727-1729 Je '62. (MIRA 15:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Biphenyl)

PENTIN, Yu.A.; TRUBNIKOV, I.S.; TEPLINSKAYA, R.B.; SHUSHERINA, N.P.;
LEVINA, R.Ya.

Infrared spectra and structure of solid δ -ketonic acids. Zhur.ob.-
khim. 32 no.6:1927-1933 Je '62. (MIRA 15:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Acids, Organic--Spectra)

LEVINA, R.Ya.; SHANAZAROV, K.S.; KOSTIN, V.N.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 78: New synthesis of 1,1,3,3,4-pentamethylcyclopentane. Zhur.ob.khim. 32 no.8:2637-2640 Ag
'62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Cyclopentane)

SHABAROV, Yu.S.; VASIL'YEV, N.I.; LEVINA, I.S.; LEVINA, R.Ya.

Azodiacoyls in diene synthesis. Zhur.ob.khim. 32 no.9:2806-2809
S '62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Azo compounds) (Unsaturated compounds)

SHUSHERINA, N.P.; LEVINA, R.Ya.; KHUAN KHUA-MIN' [Huang Hua-min]

S-Lactones and *S*-lactams. Part 29: Catalytic
cycloisomerisation of *S*-keto nitriles to
3,4-dihydro-2-pyridones. Zhur.ob.khim. 32 no.11:3599-3601
N '62. (MIRA 15:11)

1. Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova.
(Pyridone) (Nitriles)

SHUSHERINA, N.P.; LEVINA, R.Ya.; LUK'YANETS, Ye.A.; TRUBNIKOV, I.S.

δ -lactones and δ -lactams. Part 30:6-alkyl-3,4-dihydro-2-pyrones.
Zhur.ob.khim. 32 no.11:3602-3607 N '62. (MIRA 15:11)

1. Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova.

(Pyranone)

SHUSHERINA, N.P.; FEYGINA, M.Yu.; LEVINA, R.Ya.

S-Lactones and *S*-lactams. Part 31: Reactivity of
 γ -bromo-*S*-keto acid chlorides. Zhur.ob.khim. 32
no.11:3608-3611 N '62. (MIRA 15:11)

1. Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova. (Anhydrides) (Chlorides)

SHCHETININ, A.A.; TOPCHYEVA, I.N.; SHABAROV, Yu.S.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Part 23: Polymerization of
arylcyclopropanes under the effect of high pressure and temperature.
Vysokom.soed. 4 no.4:499-502 Ap '62. (MIRA 15:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Cyclopropane) (Polymerization)

S/189/63/000/001/008/008
D204/D307

AUTHORS: Shabarov, Yu. S., Potapov, V. K., Levina, R. Ya. and Treshchova, Ye. G.

TITLE: Cyclopropanes and cyclobutanes. XXVI

PERIODICAL: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 1, 1963, 61-65

TEXT: Stereoisomeric 1-methyl-2 phenylcyclobutanes and 1-methyl-3-phenylcyclobutanes were studied spectroscopically and an attempt was made to determine the cis- and trans-configurations. Raman bands at $\sim 1200\text{ cm}^{-1}$ of all isomers were slightly higher than the corresponding lines for alkylbenzenes. Cis- and trans-1-methyl-2-phenylcyclobutanes could not be distinguished in the Raman spectra. In the case of 1-methyl-3-phenylcyclobutanes, the higher boiling isomer A exhibited a broad, fairly intense band at 872 cm^{-1} , whilst the lower-boiling isomer B showed a corresponding band at 854 cm^{-1} . The $\sim 1200\text{ cm}^{-1}$ and 1600 cm^{-1} intensities were also higher

Card 1/2

Cyclopropanes and cyclobutanes ...

S/189/63/000/001/008/008
D204/D307

in B, a property characteristic of trans-forms. Uv spectra of 1-methyl-2-phenylcyclobutanes in iso-octane showed that isomer A, distinguished by higher physical constants, absorbed more strongly in the 225 - 250 mμ region than the other isomer, B. The same was true of the A-form of 1-methyl-3-phenylcyclobutane, though to a lesser extent. Control tests with 1,2-diphenylcyclopropanes, whose configurations were established chemically, showed that trans-forms absorbed more strongly in the uv. Configurations of 1-methyl-2-phenylcyclobutanes may thus be assigned only from uv absorption spectra, whilst the configurations of 1-methyl-3-phenyl-cyclobutanes remain unresolved, since Raman and uv spectra gave contradictory indications. L. A. Kazitsyna measured the uv absorption. There are 3 figures and 1 table.

ASSOCIATION: Kafedra organicheskoy khimii (Department of Organic Chemistry)

SUBMITTED: June 28, 1961

Card 2/2

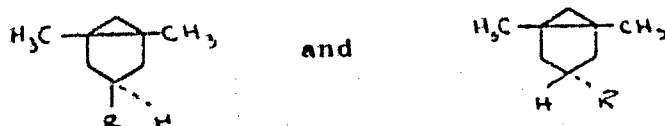
S/204/63/003/001/001/013
E075/E436

AUTHORS: Levina, R.Ya., Shanazarov, K.S., Treshchova, Ye.G.

TITLE: The synthesis of 1,1,2-trimethyl-4-alkylcyclopentanes

PERIODICAL: Neftekhimiya, v.3, no.1, 1963, 3-9

TEXT: The cyclopentanes were synthesized to serve as models for the study of similar hydrocarbons in the kerosene fractions of crude oils. The starting materials were two stereoisomers:

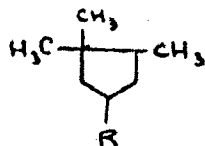


where $R = \text{CH}_3$, C_2H_5 , $\text{iso} - \text{C}_3\text{H}_7$ and $n - \text{C}_3\text{H}_7$. These hydrocarbons were passed over 15% platinized carbon with the space velocity of 0.12 h^{-1} in the current of H_2 at temperatures exceeding by 5 to 10°C their boiling points. The product was a mixture of two stereoisomers

Card 1/2

The synthesis of ...

S/204/63/003/001/001/013
E075/E436



obtained in 87 to 91% yield after a single passage through the reactor. The isomers were not separated by various gas-chromatographic methods. The formation of the products took place with the rupture of the 3-membered ring, not at the bridge junction, but in the 1,2 position. Raman spectra of the synthesized hydrocarbons have lines of highest intensity in the region of 704 to 708 cm^{-1} , which may be used for the identification of the studied cyclopentanes in hydrocarbon mixtures. There are 1 figure and 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet
im. M.V.Lomonosova (Moscow State University imeni
M.V.Lomonosov)

SUBMITTED: September 22, 1962

Card 2/2 :

SHABAROV, Yu.S.; POTAPOV, V.K.; LEVINA, R.Ya.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 26: Stereoisomeric
1,2- and 1,3-methylphenylcyclobutanes. Vest. Mosk. un. Ser. 2: Khim.
18 no. 1: 61-65 Ja-F '63. (MIRA 16:5)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.
(Cyclobutane) (Isomers)

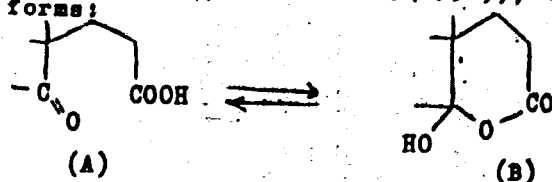
S/048/63/027/001/020/043
B106/B101

AUTHORS: Pentin, Yu. A., Trubnikov, I. S., Teplinskaya, R. B.,
Shushenina, N. P., and Levina, R. Ya.

TITLE: Infrared spectra and the structure of δ -keto acids

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,
v. 27, no. 1, 1963, 55-58

TEXT: IR spectra were taken in order to study the structures of five liquid and some crystalline δ -keto acids which, according to J. Cason and E.J. Reist (J.Organ.Chem., 23, 1675 (1958)), may exist in two tautomeric forms:



Spectrum analyses in the $3600 - 2000 \text{ cm}^{-1}$ region (stretching vibrations

Card 1/3

Infrared spectra and the ...

S/048/63/027/001/020/043
B106/B101

of OH of the carboxyl group at $3200 - 3000 \text{ cm}^{-1}$) and $1800 - 700 \text{ cm}^{-1}$ region (characteristic absorption bands of the carboxyl group) showed liquid and crystalline δ -keto acids to exist in the open-chain keto structure A, since an absorption characteristic of the lactole form (at $\sim 3200 \text{ cm}^{-1}$) was not observed. Liquid δ -keto acids (e.g. $\text{CH}_3\text{COCH}(\text{1-C}_3\text{H}_7)\text{CH}_2\text{CH}_2\text{COOH}$) are associated. A study of mixtures of a δ -keto acid with acetophenone-o-carboxylic acid having lactole structure showed that this structure becomes noticeable at a 3% content and clearly visible at 5% by an intensive 3300 cm^{-1} band. In a solution of carbon tetrachloride or chloroform the δ -keto acids (γ -acetyl butyric acid, γ -benzoyl butyric acid, γ -benzoyl pelargonic acid) as well as γ -keto acids (levulinic acid, β -benzoyl propionic acid) occur in the open-chain form, since there is no absorption either in the $3400 - 3200 \text{ cm}^{-1}$ or in the $3600 - 3550 \text{ cm}^{-1}$ regions (stretching vibrations of OH of the hydroxylactone form of keto acids). In concentrated solutions, δ -keto acids are dimerized; the content of the monomeric form increases as the concentration decreases. There are 2 figures.

Card 2/3

Infrared spectra and the ...

S/048/63/027/001/020/043
B106/B101

ASSOCIATION: Moskovskiy gos. universitet im. M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

Card 3/3

LEVINA, R.Ya.; GEMBITSKIY, P.A.; KOSTIN, V.N.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 27: Cyclopropylalkylbenzenes.
Zhur.ob.khim. 33 no.2:359-365 F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Benzene) (Cyclopropyl group)

LEVINA, R.Ya.; GEMBITSKIY, P.A.; KOSTIN, V.N.; SHOSTAKOVSKIY, S.M.;
TRESHCHOVA, Ye.G.

Cyclopropanes and cycloputanes. Part 28: p-Acetylphenyl-
cyclopropane in the synthesis of para-substituted cyclopropyl-
benzenes. Zhur.ob.khim. 33 no.2:365-371 F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Acetophenone) (Benzene derivatives)

LEVINA, R.Ya.; GEMBITSKIY, P.A.; TRESHCHOVA, Ye.G.

Cyclopropanes and cyclobutanes. Part 29: Bromination of
arylcyclopropanes. Zhur.ob.khim. 33 no.2:371-376 F '63.
(MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Cyclopropane) (Bromination)

VASIL'YEV, N.I.; LEVINA, I.S.; SHABAROV, Yu.S.; LEVINA, R.Ya.

Kinetics of diene synthesis involving azodiacryls.
Zhur.ob.khim. 33 no.3:734-738 Mr '63. (MIRA 16:3)
(Unsaturated compounds) (Azo compounds)
(Chemistry, Organic--Synthesis)

SKVARCHENKO, V.R.; TSYBIKOVA, D.TS.; LEVINA, R.Ya.

Aromatic hydrocarbons. Part 27:

2-p-Phenoxyphenyl-1,2,3,6-tetrahydrobenzoic acid in
the synthesis of 2-phenoxyfluorenes. Zhur.ob.khim.
33 no.3:995-997 Mr '63.

(MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova.

(Cyclohexanecarboxylic acid)
(Fluorene)

SKVARCHENKO, V.R.; TSVBIKOVA, D.TS.; LEVINA, R.Ya.

Aromatic hydrocarbons. Part 28: Thermal aromatization of
1,2,3,6-tetrahydrobenzoic acids to benzene and alkyl benzenes.
Zhur.ob.khim. 33 no.4:1069-1071 Ap '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Cyclohexanecarboxylic acid) (Aromatization)
(Benzene derivatives)

SHABAROV, Yu.S.; VASIL'YEV, N.I.; MAMAYEVA, N.K.; LEVINA, R.Ya.

Reduction of pyridazinones and phthalazones by lithium aluminum hydride.
Zhur.ob.khim. 33 no.4:1206-1210 Ap '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Pyridazinone) (Phthalazinone) (Lithium aluminum hydride)

TRUBNIKOV, I.S.; TEPLINSKAYA, R.B.; PENTIN, Yu.A.; SHUSHERINA, N.P.;
LEVINA, R.Ya.

Absorption spectra and structure of keto acids in solutions. Zhur.ob.
khim. 33 no.4:1210-1214 Ap '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Acids, Organic—Spectra) (Ketones)

MAZHEYKO, I.B.; GILLER, S.A.; GEMBITSKIY, P.A.; LEVINA, R.Ya.

Dipole moments of some derivatives of phenylcyclopropane,
Zhur. ob. khim. 33 no.5:1698-1699 My '63. (MIRA 16:6)

1. Institut organicheskogo sinteza AN Latvyskoy SSR i
Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Benzene—Dipole moments)

LEVINA, R.Ya.; IDYM, N.M.; GEMBITSKIY, P.A.

p-Cyclopropylbenzaldehyde. Zhur.ob.khim. 33 no.6:2074-2075
Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet.
(Benzaldehyde) (Cyclopropyl group)

SHABAROV, Yu.S.; VASIL'YEV, N.I.; MAMAYEVA, N.K.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Part 30: Cyclopropanes and
cyclobutanes with p-biphenyl and naphthyl radicals. Zhur.ob.khim.
33 no.7:2119-2123 J1 '63. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
(Cyclopropane) (Cyclobutane)

SHUSHERINA, N.P.; DMITRIYEVA, N.D.; LUK'YANETS, Ye.A.; LEVINA, R.Ye.

Nitration and bromination of 6-phenyl-2-pyrone. Zhur.ob.khim.
33 no.10:3434-3435 0 '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet.

SHABAROV, Yu.S.; POTAPOV, V.K.; LEVINA, R.Ya.

Cyclopropane and cyclobutanes. Part 35: Nitration of 1,2-diphenyl-
cyclopropane. Zhur.ob.khim. 33 no.12:3893-3897 D '63.(MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

PEREL'SON, M.Ye.; SHEYNKER, Yu.N.; DMITRIYEVA, N.D.; LUK'YANETS, Ye.
A.; SHUSHERINA, N.P.; LEVINA, R.Ya.

Integrated intensities of $C=O$ bands in the infrared spectra
of substituted α -pyrones. Izv. AN.SSSR.Ser.khim. no. 5:938-
941 My '64. (MIRA 17:6)

1. Institut khimii prirodnikh soedineniy AN SSSR i Moskovskiy
gosudarstvennyy universitet im. M.V.Lomonosova.

8/0190/64/006/003/0512/0515

ACCESSION NR: APL030371

AUTHORS: Topchiyeva, I. M.; Klobin, V. K.; Fetapov, V. M.; Levin, R. Ya.;
Kabanov, V. A.; Kargin, V. A.

TITLE: Synthesis of optically active polymers on the basis of propylenediamine and
cyclopropanedicarboxylic acid

SOURCE: Vyssokomolekulyarnyye soyedineniya, v. 6, no. 3, 1964, 512-515

TOPIC TAGS: polymer, optically active polymer, polyamide, cyclopropanedicarboxylic
acid, propylene-1,2-diamine, interfacial polycondensation, dichloride of cyclopro-
panedicarboxylic acid, turbidimetric titration

ABSTRACT: Synthesis of an optically active polymer from racemic components where
the rate of incorporation of the D or L forms into the macromolecule differed was
investigated. To 0.35 gm of racemic propylenediamine (in 400 ml water containing
0.8 gm KOH, at room temperature and under energetic stirring) were added dropwise
0.75 gm of the dichloride of trans-cyclopropanedicarboxylic-1,2 acid in 90 ml of
chloroform. After standing 30 minutes the polyamide was separated by filtration,
washed with 10% HCl and water, and purified by dissolution in 85% formic acid and

Cord 1/2

ACCESSION NR: AP4030371

subsequent precipitation with ammonia. The synthesis of a polyamide from L-propylenediamine was conducted in a similar way. From this polyamide the cyclopropanedicarboxylic acid component was recovered by hydrolysis with phosphoric acid, treatment with barium hydroxide, and passage through a column containing the cationic resin KU-2. The recovered acid was found to be optically inert, while the polyamide itself displayed an optical rotation of a sign opposite to that of the original L-propylenediamine (its optical rotation dispersion curve being normal). It was also observed that the melting point of the optically active polymer was 40 to 50 degrees higher than that of the racemic polyamide. Orig. art. has: 1 formula and 3 charts.

ASSOCIATION: Moscovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 26Mar63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: CH

NO REF SOV: 002

OTHER: 007

Card 2/2

SHUSHERINA, N.P.; DMITRIYEVA, N.D.; SHIL'NIKOVA, A.G.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Sulfonation of 2-pyrones. Vest.
Mosk. un. Ser. 2: Khim. 19 no.6:60-62 N-D '64. (MIRA 18:3)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.

SHUSHERINA, N.P.; LUK'YANETS, Ye.A.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 35; Dichlorides of 3,4-dihydroxypyra-
none-2(δ -enol lactones). Zhur.ob.khim. 34 no.1:20-24 Ja '64. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

LEVINA, R.Ya.; GEMBITSKIY, P.A.; GUSEVA, L.P.; AGASYAN, P.K.

Cyclopropanes and cyclobutanes. Part 36: Evaluation of the reactivity
of aryl cyclopropanes with the aid of Gammett equations. Zhur.ob.khim.
34 no.1:146-151 Ja '64. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

SHABAROV, Yu.S.; SMIRNOVA, A.P.; LEVINA, R.Ya.

Adducts of azodicarboxylic ester in the synthesis of bicyclic compounds with two common nitrogen atoms: 4-~~acyl~~triazolidino-(1,2-1',2')- Δ^4 -tetrahydropyridazines and their derivatives. Zhur.ob.khim. 34 no.2: 390-394 F '64. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

SKVARCHENKO, V.R.; SUKHAREVA, T.S.; LEVINA, R.Ya.

Aromatic hydrocarbons. Part 29: Stereoisomeric tetrahydrophthalic acids and their anhydrides in the reaction with phosphorus pentoxide. Zhur. ob. khim. 34 no. 3:752-760 Mr '64. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

Иванченко, В. Р.; Пучнова, В. А.; Левина, Р. Я.

1947-1948 and 1949-1950

ЖУРНАЛ ОБЩЕЙ ХИМИИ, т. 32, № 1, 1962

7. CAS brominated organic compound, aromatic hydrocarbon, phosphorus
8. CAS and IR

These adducts do not undergo the usual reactions of the structure, but those not containing formaldehyde undergo polymerization followed by degradation to the corresponding alcohols and aldehydes.

1021065

1021065 1021065

4-bromodiphenyl 2-(p-bromobenzyl)-1,2,3,4-tetrahydrobenzoic acid, when heated with toluene and phosphorous pentoxide and sulfur entered into intramolecular acylation of toluene followed by conversion of the intermediate hydroaromatic ketone to 2-bromo-4-p-bromobenzylbenzene.

LOCATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
Moscow State University

1021065 1021065

1021065

1021065 1021065

1021065

1021065

Card 2/2

SHUSHERINA, N.P.; GLADYSHEVA, T.Kh.; MUR, G.D.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 36: Interaction of 5,6-disubstituted 3,3-dihydro-2-pyrones (δ -enol lactones) with organomagnesium compounds. Synthesis of 2,2,5,6-tetrasubstituted 3,4-dihydropyrans. Zhur. ob. khim. 34 no.8:2499-2504 Ag '64.
(MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.

SHUSHERINA, N.P.; LUK'YANETS, Ye.A.; LEVINA, R.Ya.

δ -Lactones and ϵ -lactams. Part 38: Halogenation of
5-chloro-6-aryl-3,4-dihydro-2-pyrones. Zhur. ob. khim.
34 no.8:2504-2507 Ag '64. (MIRA 17:9)

δ -Lactones and ϵ -lactams. Part 39: New synthesis of
5-halo-6-aryl-2-pyrones and 6-aryl-2-pyrones. Zhur. ob.
khim. 34 no.8:2507-2512 Ag '64. (MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

POTAPOV, V.K.; SHABAROV, Yu.S.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Part 37: Capacity of arylcyclo-
propanes for complex formation with mercury acetate. Zhur. ob.
khim. 34 no.8:2512-2517 Ag '64. (MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet.

SHABAROV, Yu.S.; POTAPOV, V.K.; KOLOSKOVA, N.M.; PODTSEBKOVA, A.A.;
SVIRINA, V.S.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Part 38: Nitration of 2-substituted
phenylcyclopropanes. Zhur. ob. khim. 34 no.9:2829-2832 S '64.
(MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

SHABAROV, Yu.S.; POTAPOV, V.K.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Part 39: Electron-donor properties
of small rings. Zhur. ob. khim. 34 no.9:2832-2834 S '64. (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

DMITRIYEVA, N.D.; SHIL'NIKOVA, A.G.; SHUSHERINA, N.P.; LEVINA, R.Ya.

δ -lactones and δ -lactams. Part 40: Position of the substituent entering an α -pyrone ring during electrophilic substitution reactions. Zhur. ob. khim. 34 no.9:2835-2836 S '64. (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

SHABAROV, Yu.S.; POTAPOV, V.K.; LEVINA, R.Yu.

Ortho- and para-substituted phenylcyclopropanes. Zhur. ob. khim.
34 no.9:3127-3128 S '64. (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

1. NAME: [REDACTED]; 2. DATE OF BIRTH: [REDACTED]; 3. PLACE OF BIRTH: [REDACTED]; 4. SEX: [REDACTED]; 5. OCCUPATION: [REDACTED]; 6. EDUCATION: [REDACTED]; 7. RELIGION: [REDACTED]; 8. POLITICAL AFFILIATION: [REDACTED]; 9. SOCIAL STATUS: [REDACTED]; 10. OTHER INFORMATION: [REDACTED]

2-Pyrene-3-carboxylic acids. Zhur. Zh. Khim. 34, no. 9:3128, 1957 (MIRA 17:11)

(MIPA 17:11)

1. Moskovskiy gosudarstvennyy universitet.

SHUSHERINA, N.P.; GLADYSHEVA, T.Kh.; LEVINA, R.Ya.

Rearrangement of δ -enollactones to 1,3-cyclohexanediones. Zhur.
ob. khim. 34 no.10:3509-3510 O '64.

(MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.

TOPCHIEVA, I.N.; LEVINA, R.Ya.; KABANOV, V.A.; KARGIN, V.A.,
akademik

Stereospecific effects in interfacial polycondensation.
Dokl. AN SSSR 156 no. 4:929-931 Je '64. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

SHUSHERINA, N.P.; GLADYSHEVA, T.Kh.; TRESHCHOVA, Ye.G.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 44: Behavior of 2,2,5,6-tetrasubstituted 3,4-dihydropyrans during their hydrolysis-transformation to cyclohexadienes. Zhur. org. khim. 1 no.4: 673-678 Ap '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

SHUSHERINA, N.P.; LUK'YANETS, Ye.A.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 45: Halogenation of 6-aryl-2-pyrones. Zhur. org. khim. 1 no.4:679-683 Ap '65.
(MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

SHUSHTRINA, N.P.; GLADYSHEVA, T.Kh.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 46: Rearrangement during the action of organomagnesium compounds on δ -enollactones with a semicyclic double bond. Zhur. org. khim. 1 no.6:1010-1016 Je '65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

LUK'YANETS, Ye.A.; SHUSHERINA, N.P.; TRESHCHOVA, Ye.G.; KAZITSINA, L.A.;
LEVINA, R.Ye.

δ -lactones and δ -lactams. Part 47: Spectroscopic study of
 δ -enollactones with a semicyclic and endocyclic double bond.
Zhur. org. khim. 1 no.7:1194-1199 J1 '65.

(MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

SHUSHERINA, N.P.; LUK'YANETS, Ye.A.; LEVINA, R.Ya.

δ -Lactones and δ -lactams. Part 48: New synthesis of 6-bromomethyl-5-alkyl(aryl)-2-pyrones. Zhur. org. khim. 1 no.8:1502-1507 Ag '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

LIK'YANETS, Ye.A.; SHUSHERINA, N.P.; LEVINA, R. Ya.

δ -lactones and δ -lactams. Part 49: Synthesis of 6-alkyl-
pyrones. Zhur. org. khim. 1 no. 12:2226-2228 D '65
(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted November 23, 1964.

SHABAROV, Yu.S.; DONSKAYA, N.A.; SYCHKOVA, L.D.; LEVINA, R.Ya.

Cyclopropanes and cyclobutanes. Behavior of phenylcyclobutane
in the reactions of electrophilic substitution. Vest. Mosk.
un. Ser. 2:Khim. 20 no. 5:73-76 8-0 '65. (MIRA 18:12)

1. Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo
universiteta. Submitted Nov. 9, 1964.

TORCHITSKYA, I.N.; AL'YETSO, M.; LEVINA, R.Ya.

Trans-cis isomerization of 1,2,cyclopropanedicarboxylic acid.
Zhur. ob. khim. 35 no.4:740 Ap '65.

(MIRA 10-5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.

LEVINA, R.Ya.; KOSTIN, V.N.; GAL'PERN, Ye.G.; TRESHCHOVA, Ye.G.

Synthesis of hydrocarbons. Part 81: Cyclopropanes with quaternary carbon atoms in the ring and in a side chain. Zhur. ob. khim. 35 no.5:785-788 My '65. (MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

TOPCHIYEVA, I.N.; LEVINA, R. Ya.

Racemization ability of optically active trans-cyclopropanedicarboxylic acid in interphase polycondensation. Vysokom. soed. 8 no. 1:3-7 Ja '66 (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted January 27, 1965.

LEVINA, R. E.

"Contribution to the understanding of alternation of generations in higher plants in the light of the theory of development by stages."
by Levina, R. E. (p. 321)

SO: Journal of General Biology(Zhurnal Obshchei Biologii) Vol. X, No. 4, 1949

LEVINA, R. YE.

Birch

New habitat of *Betula Humilis* Schrank. Bot. mat. Gerb. 14, 1951.

Monthly List of Russian Accessions. Library of Congress. November 1952. UNCLASSIFIED.

1. LEVINA, R. YE.
2. USSR (600)
4. Weeds
7. Weeds in some sections of the forest belt Panza-Kamensk. Bot. Zhur. 37 no. 1, 1952. Ul'yanovskiy Gosudarstvennyy Pedagogicheskiy Institut Red. 9 Sept. 1951
- 9a. Monthly List of Russian Accessions, Library of Congress, April 1952, UNCLASSIFIED.

LEVINA, R.Ye.

Plant dissemination in the steppes. Bot.zhur. 41 no.5:619-633 My '56.
(MLRA 10:7)

1. Ul'yanovskiy gosudarstvennyy pedagogicheskiy institut.
(Steppe flora)

LEVINA, R.Ye.

Current status and paths of the development of carpobiology.
Bot.shur. 41 no.11:1571-1578 N '56. (MIRA 10:1)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk
SSSR, Leningrad.
(Seeds--Dissemination)

LEVINA, Rosa Yefimovna; BOGDANOV, A.I., redaktor; GUR'YANOV, V.P., tekhnicheskii redaktor

[Natural distribution of fruits and seeds] Sposoby rasprostraneniia plodov i semian. [Moskva] Izd-vo Mosk.univ., 1957. 357 p. (Materialy k poznaniiu fauny i flory SSSR. Novaya seriia. Otdel botanicheskii, no.9 (XVII)) (MIRA 10:9)
(Seeds—Dissemination)

LEVINA, R. Ye

AUTHOR: None Given

30-58-4-34/44

TITLE: Dissertations (Dissertatsii).
Branch of Biological Sciences (Otdeleniye biologicheskikh nauk).
July-December 1957 (Iyul' - Dekabr' 1957)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 4,
pp. 119-120 (USSR)

ABSTRACT: 1) At the Botanical Institute imeni V. L. Komarov (Botanicheskiy institut imeni V. L. Komarova) the following dissertation for the degree of a Doctor of Biological Sciences was defended:
R. Ye. Levina - Method of Propagation for Fruits and Seeds (Sposoby rasprostraneniya plodov i semyan).
2) At the Zoological Institute (Zoologicheskiy institut) the following dissertations for the degree of a Candidate of Biological Sciences were defended:
Yu. S. Balashov - Nutrition Peculiarities of the Ixodic Mites (Osobennosti pitaniya iksodovykh

Card 1/5

Dissertations. Branch of Biological Sciences.
July-December 1957

30-58-4-34/44

kleshchey).

- I. V. Stebayev - Fauna and Ecology of the Orthoptera Insects of the North-Western Prikaspiye (Fauna i ekologiya pryamokrylykh nasekomykh severo-zapadnogo Prikaspiya).
- 3) At the Institute for Biochemistry imeni A. N. Bakh (Institut biokhimii imeni A. N. Bakha) the following dissertations for the degree of a Candidate of Biological Sciences were defended:
- I. N. Garkina - Methods of Distribution and Determination of Vitamin Substitutes (provitaminov) and of "D" Vitamin. (Metody raspredeleniya i opredeleniya provitaminov i vitaminov "D").
- T. V. Drozdova - Phytin and its Transformations in Natural Processes (Fitin i yego prevrashcheniya v prirodnykh protsessakh).
- B. P. Poglazov - Investigation of the Adenosin Triphosphatase of Muscels and of Some Plants.

Card 2/5

Dissertations. Branch of Biological Sciences.
July-December 1957

30-58-4-34/44

(Izucheniye adenzintrifosfatazmyshta i
nekotorykh rasteniy).

A. S. Spirin - Investigation of the Specificity of Species
(spezifichnost') of Nucleinic Acids in Bac-
teria (Izucheniye vidovoy spezifichnosti
nukleinovyykh kislot u bakteriy).

4) At the Institute for Higher Nerve Function (Institut
vysshey nervnoy deyatel'nosti) the following disser-
tations were defended:

a) for the degree of a Doctor of Medical Sciences:

N. G. Gartsshteyn - Investigation Test of the Nerve
Mechanisms of a Depression of Reaction
and Some Forms of Its Therapy (Opyt izu-
cheniya nervnykh mekhanizmov reaktivnoy
depressii i nekotorykh form yeye terapii).

N. I. Kozin - Injuries of the Higher and Vegetative Nerve
Function in Children Caused by Scarlet Fever.
(Narusheniya vysshey i vegetativnoy nervnoy
deyatelnosti pri skarlatine u detey).

Card 3/5

Dissertations. Branch of Biological Sciences.
July-December 1957

30-58-4-34/44

b) for the degree of a Candidate of Biological Sciences:
O. N. Vasil'yeva - Correlations Between Unconditioned
and Conditioned Motion Reflexes and De-
fence Reflexes in Overlapping (Vzaimoot-
nosheniye mezhdu bezuslovnymi i uslovnymi
dvigatel'nymi oboronitel'nymi refleksami
pri perekrytii).

c) for the degree of a Candidate of Medical Sciences:
Ye. D. Markova - Peculiarities of the Injury of the Neuro-
dynamics in an Amnesic Aphasia (Osobennosti
narusheniya neyrodinamiki pri amnestiches-
koy afazii).

5) At the Institute for Forestry (Institut lesa) the
following dissertations were defended:

a) for the degree of a Doctor of Biological Sciences:
A. I. Zrazhevskiy - Earth Worms as a Fertility Factor of
Forest Soils. (Dozhdevyye chervi kak
faktor plodorodiya lesnykh pochv).

b) for the degree of a Doctor of Agricultural Sciences:
V. V. Pcpov - Scientific Principles of Growing Broad-

Card 4/5

Dissertations. Branch of Biological Sciences.
July-December 1957

30-58-4-34/11

-Leaved Plantations in the Northern Variant
of the Timbered Steppe. (Nauchnyye osnovy
vyrashchivaniya shirokolistvennykh nasazhde-
niy v severnom variante lesostepi).

- o) for the degree of a Candidate of Biological Sciences:
V. M. Zubarev - Biological Reasons for the Possibility of
Transplanting Oak-Trees to the Northern
Districts of the European Part of the USSR.
(Biologicheskoye obosnovaniye vozmozhnosti
prodvizheniya duba chereshchatogo v severnyye
rayony Yevropeyskoy chasti USSR).
- M. V. Nadezhdina - Dynamics of the Covering of Terrains
on the Slopes of Gorges in Connection
With Soil Erosion and With the Grazing of
Animals. (Dinamika rastitel'nogo pokrova
na sklonakh balok i ovragov v svyazi s
eroziyey pochv i vypasom zhivotnykh).

1. Biology—Bibliography 2. Bibliography—Biology

Card 5/5

LEVINA, R.Ye.; KHOKHULINA, I.A.

"Darwinism; textbook for pedagogical institutes" by E.A. Veselov.
Reviewed by R.Ye. Levina and I.A. Khokhulina. Bot.shur. 42 no.4:649-655
Ap '57. (MLRA 10:5)

1.Ul'yanovskiy gosudarstvennyy pedagogicheskiy institut.
(Evolution)
(Veselov, E.A.)

LEVINA, Roza Yefimovna, doktor biol. nauk; MARKOV, N.G., red.; KREYS,
I.G., tekhn. red.

[Variety and development of forms of plant propagation] Mnogo-
obrazie i evoliutsia form razmnozhenia rastenii. Moskva, Gos.
uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1961. 69 p.
(MIRA 15:1)

1. Ul'yanovskiy pedagogicheskiy institut (for Levina).
(Plant propagation)

LEVINA, R.Ye.

Fruit classification and nomenclature. Bot. zhur. 46 no.4:486-495
Ap '61. (MIRA 14:3)

1. Ul'yanovskiy pedagogicheskiy institut im. I.N.Ul'yanova.
(Fruit—Morphology)

LEVINA, R.Ye.

Studying the rhythm of fruit bearing in perennial herbaceous plants.
Bot. zhur. 48 no.10:1512-1520 0 '63. (MIRA 17:1)

1. Ul'yanovskiy pedagogicheskiy institut imeni I.N.Ul'yanova.

LEVINA, R.F.

First Volga Valley Interuniversity conference on the biology of
seed reproduction. Bot. zhur. 49 no. 6:925-926. 1964.

1. Ul'yanovskiy pedagogicheskiy institut imeni V.I. Lenina.
(MIRA 17:13)

LEVINA, Roza Yefimovna; MARKOV, N.G., red. [deceased]

[Variety and evolution of the forms of plant reproduction] Mnogoobrazie i evoliutsiia form razmnozheniia rastenii. Izd.2., ispr. Moskva, Prosveshcheniia, 1964.
65 p. (MIRA 18:5)

LEVINA, R.Ye.

Rhythm of fruiting in herbaceous perennials as exemplified
by *Trifolium montanum* L. and *Trifolium alpestre* L. Bot.zhur.
50 no.7:917-932 J1 '65. (MIRA 18:11)

1. Ul'yankovskiy pedagogicheskiy institut imeni Ul'yankova.

LEVINA, R.Ye.

In memory of a teacher; on the 75th anniversary of the
birth of Boris Mikhailovich Kozo-Polianskii (1890-1957).
Bot.zhur. 50 no.11:1651-1654 N '65.

(MIRA 19:1)

1. Ul'yanovskiy pedagogicheskiy institut imeni I.N.
Ul'yanova. Submitted May 25, 1965.

LEVINA, R.Ye., kandidat pedagogicheskikh nauk.

A child's speech. Edorov's 2 no.3:23-24 Mr '56

(MIRA 9:6)

(CHILDREN--LANGUAGE)

LEVINA, R. Ye.

Psychological study of lack of progress in young schoolchildren
[with summary in English]. Vop.psikhol. 4 no.4:99-108 J1-Ag '58.
(MIRA 11:11)

1. Institut defectologii Akademii nauk RSFSR, Moskva.
(Learning, Psychology of)

LEVINA, R. Ye.

"Primeneniye psikhologicheskikh issledovaniy v izuchenii i preodolenii narushenii rechi u detey."

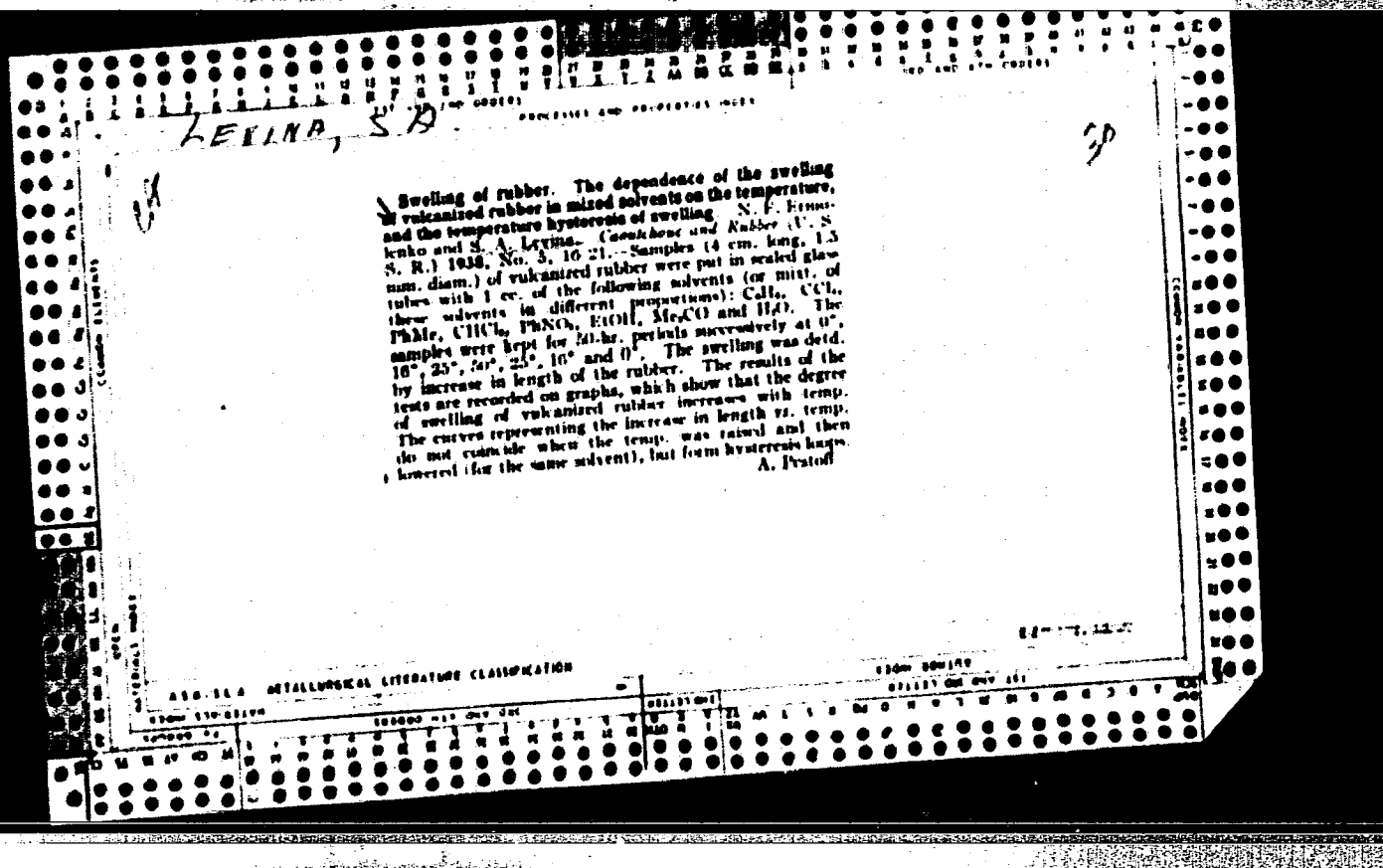
report submitted for 15th Intl Cong, Intl Assn of Applied Psychology, Ljubljana, Yugoslavia, 2-8 Aug 1964.

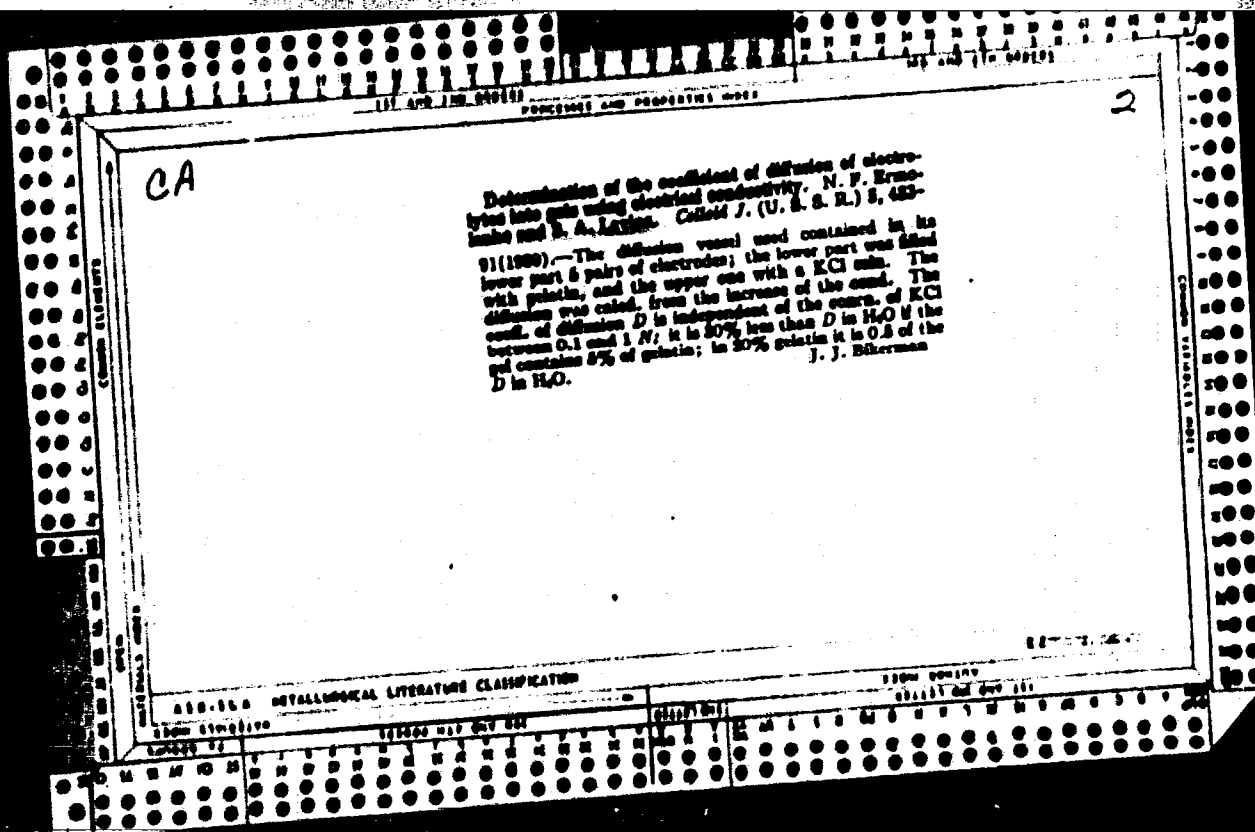
Institut defektologii, Moskva.

LEVINA, R. Ye.

Psychological approaches to the problem of predicting deviations in psychological development. Vop. psikh. 10 no.1: 135-144 Ja-F'64. (MIRA 17:3)

1. Institut defektologii Akademii pedagogicheskikh nauk RSFSR, Moskva.





bc

111

Periodic sedimentation from solutions during evaporation of the solvent. N. P. JANNOLAKIS and H. L. MYRNA. (J. Gen. Chem. Russ., 1939, 9, 968-970).—Periodic sedimentation is obtained with any inorg. salt (16 were tested) if its 0.002N solution is evaporated at 65° on a watch glass, and with any org. acid (11 were tested) if its aq. solution is evaporated at 16°/2 mm. in a narrow tube. NH_4Cl , TiCl_3 and Ba(OH)_2 give the highest, and Na_2SO_4 and malic acid the lowest no. of rings. These observations agree with the theory (cf. A., 1938, 1, 307). J. J. B.

ASAC-ELA METALLURGICAL LITERATURE CLASSIFICATION

1900-1909	1910-1919	1920-1929	1930-1939	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999

The adsorption of organic acids from single and mixed solvents. N. P. Kravchenko and S. A. Levina. *Acta Physicochim.* U. R. S. S. 18, 61-64 (1950) (in English).—
In the mixed solvent systems: CCl₄-C₆H₆, CCl₄-PhMgBr, (I), C₆H₆-PhMgBr (II), C₆H₆-CHCl₃, C₆H₆-EtOH, CCl₄-EtOH, CCl₄-MeCO (III), EtOH-H₂O, MeCO-EtOH (IV), CHCl₃-MeCO, and CHCl₃-EtOH, the adsorption isotherms of salicylic and butyric acids on charcoal from their 0.010 *N* solutions at room temp., are practically the same from solutions of mixtures of the acids as from solutions of the single acids alone. The Macos rule (*Dissertation*, Leipzig 1948, 68), stronger adsorption from a mixture of the acid more strongly adsorbed separately, was confirmed. From mixed solvents of similar polarities as IV or of similar chemical nature as II the total adsorption was practically independent of the relative contents of the solvents. From mixed solvents of the polar-nonpolar types I-III the adsorption of salicylic acid from mixtures increases with an increase in the contents of the nonpolar component while for butyric acid other factors predominate. For pure solvents in a given homologous series, the adsorption of the two acids increases with an increase in the dielectric constant or in the molal polarization. F. H. Rathmann

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929610014-9

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929610014-9"

23

CA

Effect of nonsolvent on the structural properties of acetone solutions of cellulose acetate. N. P. Kuznetsov and A. A. Lavina (Acad. Sci. Bykhurma, S.S.R., Minsk). *Kolloid. Zhur.* 12, 206-04 (1950).—Cellulose acetate (I) (K 65, AcOH) was fractionally pptd. from acetone soln. with H₂O, and the 2 fractions obtained were dissolved in acetone + a nonsolvent (II). When the concn. of II was increased, the light scattering (J) and the viscosity (η) of the 1% solns. passed through a min. for both fractions when II was CHCl₃, benzene, or EtOH; J showed a min. when II was xylene. Solns. of I (2%) showed a decrease when the rate of shear increased (measurements in a capillary viscometer at different pressures), but this decrease was small when II was H₂O or xylene. Addn. of II causes denaturation and change in the degree of aggregation of I. J. J. Bikerman

YERMOLENKO, N.F.; LEVINA, S.A. kandidat khimicheskikh nauk

Desolvation of cellulose esters through the action of nonsolvents.
Izv. AN BSSR no.1:141-151 Ja-F '51. (MLRA 8:10)

1. Deystvitel'nyy chlen Akademii nauk BSSR (for Yermolenko)
(Cellulose esters) (Solvation)

LEVINA, S. A.

3

Structure of aluminum hydroxide and its adsorptive capacity. N. P. Kuznetsov and S. A. Levina. *Vestn. Akad. Nauk Belorus. SSR*, 1954, No. 1, 101-7 (in Russian).
--The relation between the formation stages of $Al(OH)_3$ (I)

gel and its adsorptive capacity for org. dyes (alizarin yellow and azolitmin) was investigated as a means of studying the phys. structure of I. An $Al_2(SO_4)_3$ sol. treated with equiv. amts. of either Na_2CO_3 or $NaOH$ was used to prep. the I gel. The max. adsorptive activity of I occurs when I is first formed from the hydrolyzed Al salts, but before the formation of the I-lobules takes place; shortly after I is formed the adsorptive capacity of the gel rapidly decreases, approx. to $1/2$ of its original value, owing to the transformation of the I-lobules from the amorphous into a transient and finally into a cryst. stage; and the dispersion of the I particles changes with change in pH of the surrounding medium and with the time after the formation of I (at pH 8 the relative amt. of the I particles with a diam. of 3μ is much larger than at pH 4.18-6.22; at lower pH the particles with a diam. of $5-10\mu$ (which seem to be polymers of the 3μ particles) predominate).
V. Wiesbicki

✓ Structure of aluminum hydroxide and its absorptive ca-
pacity. N. P. Ermolenko and G. A. Levina. *Izv. Akad. Nauk SSSR*, 1934, Nov. 1, 100-101 (in Russian).
See C.A. 49, 14417i. E. Wierbicki

✓ Structure and adsorption activity of aluminum, chromium, and iron hydroxides as functions of the conditions of their formation. S. A. Levina and N. B. Brudenko (Inst. Chem., Acad. Sci. USSR, Moscow, U.S.S.R.). *Zh. fiz. khim.*, 1977, 51(1903), 41, 1903-1904, 41 refs. The most frequent (sedimentometric) particle radius r of freshly prep. gels of $Al(OH)_3$ and $Cr(OH)_3$ was 0.6μ while this r for $Fe(OH)_3$ was $5-25 \mu$. Agitation caused breakdown of larger particles. After a month, r was detectable in an electron microscope. Dialysis increased r of $Al(OH)_3$ and $Cr(OH)_3$ but had no effect on r of $Fe(OH)_3$ gels. The adsorption of Azolitmin by dialyzed or aged gels was smaller than that by gels in the moment of their formation. The amt. of $PhOH$, $BzOH$, and salicylic acid (I) adsorbed by the gels was much greater than expected from the surface area A calcd. from the r ; e.g., an $Al(OH)_3$ with $A = 85 \text{ sq. m./g.}$ took up enough I to cover 1000 sq. m./g. Dehydration of $Al(OH)_3$ lowered A from, e.g., 91 sq. m./g. to 51 sq. m./g. J. J. Bikerman

① MET

LEVINA, S. A. and YERMOLENKO, B. F.

"Structure and Adsorption Activity of Aluminum Hydroxides in relation to Conditions of Formation" (Struktura i adsorbtsionnaya aktivnost' gidrookisi alyuminiya b zavisimosti ot usloviy obrazovaniya) from the book Trudy of the Third All-Union Conference on Colloid Chemistry, pp. 276-284, Iz. AN SSSR, Moscow, 1956

(Report given at above Conference, Minsk, 21-4 Dec 53)

Yermolenko: Act. Mr. AS BSSR

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929610014-9

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929610014-9"

*Adherent activity of cadmium hydroxide in relation to
its methods of preparation* ^{L7}
B. A. K. ~~1964~~ ¹⁹⁶⁵ ~~1966~~ ¹⁹⁶⁷ ~~1968~~ ¹⁹⁶⁹ ~~1970~~ ¹⁹⁷¹ ~~1972~~ ¹⁹⁷³ ~~1974~~ ¹⁹⁷⁵ ~~1976~~ ¹⁹⁷⁷ ~~1978~~ ¹⁹⁷⁹ ~~1980~~ ¹⁹⁸¹ ~~1982~~ ¹⁹⁸³ ~~1984~~ ¹⁹⁸⁵ ~~1986~~ ¹⁹⁸⁷ ~~1988~~ ¹⁹⁸⁹ ~~1990~~ ¹⁹⁹¹ ~~1992~~ ¹⁹⁹³ ~~1994~~ ¹⁹⁹⁵ ~~1996~~ ¹⁹⁹⁷ ~~1998~~ ¹⁹⁹⁹ ~~2000~~ ²⁰⁰¹ ~~2002~~ ²⁰⁰³ ~~2004~~ ²⁰⁰⁵ ~~2006~~ ²⁰⁰⁷ ~~2008~~ ²⁰⁰⁹ ~~2010~~ ²⁰¹¹ ~~2012~~ ²⁰¹³ ~~2014~~ ²⁰¹⁵ ~~2016~~ ²⁰¹⁷ ~~2018~~ ²⁰¹⁹ ~~2020~~ ²⁰²¹ ~~2022~~ ²⁰²³ ~~2024~~ ²⁰²⁵ ~~2026~~ ²⁰²⁷ ~~2028~~ ²⁰²⁹ ~~2030~~ ²⁰³¹ ~~2032~~ ²⁰³³ ~~2034~~ ²⁰³⁵ ~~2036~~ ²⁰³⁷ ~~2038~~ ²⁰³⁹ ~~2040~~ ²⁰⁴¹ ~~2042~~ ²⁰⁴³ ~~2044~~ ²⁰⁴⁵ ~~2046~~ ²⁰⁴⁷ ~~2048~~ ²⁰⁴⁹ ~~2050~~ ²⁰⁵¹ ~~2052~~ ²⁰⁵³ ~~2054~~ ²⁰⁵⁵ ~~2056~~ ²⁰⁵⁷ ~~2058~~ ²⁰⁵⁹ ~~2060~~ ²⁰⁶¹ ~~2062~~ ²⁰⁶³ ~~2064~~ ²⁰⁶⁵ ~~2066~~ ²⁰⁶⁷ ~~2068~~ ²⁰⁶⁹ ~~2070~~ ²⁰⁷¹ ~~2072~~ ²⁰⁷³ ~~2074~~ ²⁰⁷⁵ ~~2076~~ ²⁰⁷⁷ ~~2078~~ ²⁰⁷⁹ ~~2080~~ ²⁰⁸¹ ~~2082~~ ²⁰⁸³ ~~2084~~ ²⁰⁸⁵ ~~2086~~ ²⁰⁸⁷ ~~2088~~ ²⁰⁸⁹ ~~2090~~ ²⁰⁹¹ ~~2092~~ ²⁰⁹³ ~~2094~~ ²⁰⁹⁵ ~~2096~~ ²⁰⁹⁷ ~~2098~~ ²⁰⁹⁹ ~~2100~~ ²¹⁰¹ ~~2102~~ ²¹⁰³ ~~2104~~ ²¹⁰⁵ ~~2106~~ ²¹⁰⁷ ~~2108~~ ²¹⁰⁹ ~~2110~~ ²¹¹¹ ~~2112~~ ²¹¹³ ~~2114~~ ²¹¹⁵ ~~2116~~ ²¹¹⁷ ~~2118~~ ²¹¹⁹ ~~2120~~ ²¹²¹ ~~2122~~ ²¹²³ ~~2124~~ ²¹²⁵ ~~2126~~ ²¹²⁷ ~~2128~~ ²¹²⁹ ~~2130~~ ²¹³¹ ~~2132~~ ²¹³³ ~~2134~~ ²¹³⁵ ~~2136~~ ²¹³⁷ ~~2138~~ ²¹³⁹ ~~2140~~ ²¹⁴¹ ~~2142~~ ²¹⁴³ ~~2144~~ ²¹⁴⁵ ~~2146~~ ²¹⁴⁷ ~~2148~~ ²¹⁴⁹ ~~2150~~ ²¹⁵¹ ~~2152~~ ²¹⁵³ ~~2154~~ ²¹⁵⁵ ~~2156~~ ²¹⁵⁷ ~~2158~~ ²¹⁵⁹ ~~2160~~ ²¹⁶¹ ~~2162~~ ²¹⁶³ ~~2164~~ ²¹⁶⁵ ~~2166~~ ²¹⁶⁷ ~~2168~~ ²¹⁶⁹ ~~2170~~ ²¹⁷¹ ~~2172~~ ²¹⁷³ ~~2174~~ ²¹⁷⁵ ~~2176~~ ²¹⁷⁷ ~~2178~~ ²¹⁷⁹ ~~2180~~ ²¹⁸¹ ~~2182~~ ²¹⁸³ ~~2184~~ ²¹⁸⁵ ~~2186~~ ²¹⁸⁷ ~~2188~~ ²¹⁸⁹ ~~2190~~ ²¹⁹¹ ~~2192~~ ²¹⁹³ ~~2194~~ ²¹⁹⁵ ~~2196~~ ²¹⁹⁷ ~~2198~~ ²¹⁹⁹ ~~2200~~ ²²⁰¹ ~~2202~~ ²²⁰³ ~~2204~~ ²²⁰⁵ ~~2206~~ ²²⁰⁷ ~~2208~~ ²²⁰⁹ ~~2210~~ ²²¹¹ ~~2212~~ ²²¹³ ~~2214~~ ²²¹⁵ ~~2216~~ ²²¹⁷ ~~2218~~ ²²¹⁹ ~~2220~~ ²²²¹ ~~2222~~ ²²²³ ~~2224~~ ²²²⁵ ~~2226~~ ²²²⁷ ~~2228~~ ²²²⁹ ~~2230~~ ²²³¹ ~~2232~~ ²²³³ ~~2234~~ ²²³⁵ ~~2236~~ ²²³⁷ ~~2238~~ ²²³⁹ ~~2240~~ ²²⁴¹ ~~2242~~ ²²⁴³ ~~2244~~ ²²⁴⁵ ~~2246~~ ²²⁴⁷ ~~2248~~ ²²⁴⁹ ~~2250~~ ²²⁵¹ ~~2252~~ ²²⁵³ ~~2254~~ ²²⁵⁵ ~~2256~~ ²²⁵⁷ ~~2258~~ ²²⁵⁹ ~~2260~~ ²²⁶¹ ~~2262~~ ²²⁶³ ~~2264~~ ²²⁶⁵ ~~2266~~ ²²⁶⁷ ~~2268~~ ²²⁶⁹ ~~2270~~ ²²⁷¹ ~~2272~~ ²²⁷³ ~~2274~~ ²²⁷⁵ ~~2276~~ ²²⁷⁷ ~~2278~~ ²²⁷⁹ ~~2280~~ ²²⁸¹ ~~2282~~ ²²⁸³ ~~2284~~ ²²⁸⁵ ~~2286~~ ²²⁸⁷ ~~2288~~ ²²⁸⁹ ~~2290~~ ²²⁹¹ ~~2292~~ ²²⁹³ ~~2294~~ ²²⁹⁵ ~~2296~~ ²²⁹⁷ ~~2298~~ ²²⁹⁹ ~~2300~~ ²³⁰¹ ~~2302~~ ²³⁰³ ~~2304~~ ²³⁰⁵ ~~2306~~ ²³⁰⁷ ~~2308~~ ²³⁰⁹ ~~2310~~ ²³¹¹ ~~2312~~ ²³¹³ ~~2314~~ ²³¹⁵ ~~2316~~ ²³¹⁷ ~~2318~~ ²³¹⁹ ~~2320~~ ²³²¹ ~~2322~~ ²³²³ ~~2324~~ ²³²⁵ ~~2326~~ ²³²⁷ ~~2328~~ ²³²⁹ ~~2330~~ ²³³¹ ~~2332~~ ²³³³ ~~2334~~ ²³³⁵ ~~2336~~ ²³³⁷ ~~2338~~ ²³³⁹ ~~2340~~ ²³⁴¹ ~~2342~~ ²³⁴³ ~~2344~~ ²³⁴⁵ ~~2346~~ ²³⁴⁷ ~~2348~~ ²³⁴⁹ ~~2350~~ ²³⁵¹ ~~2352~~ ²³⁵³ ~~2354~~ ²³⁵⁵ ~~2356~~ ²³⁵⁷ ~~2358~~ ²³⁵⁹ ~~2360~~ ²³⁶¹ ~~2362~~ ²³⁶³ ~~2364~~ ²³⁶⁵ ~~2366~~ ²³⁶⁷ ~~2368~~ ²³⁶⁹ ~~2370~~ ²³⁷¹ ~~2372~~ ²³⁷³ ~~2374~~ ²³⁷⁵ ~~2376~~ ²³⁷⁷ ~~2378~~ ²³⁷⁹ ~~2380~~ ²³⁸¹ ~~2382~~ ²³⁸³ ~~2384~~ ²³⁸⁵ ~~2386~~ ²³⁸⁷ ~~2388~~ ²³⁸⁹ ~~2390~~ ²³⁹¹ ~~2392~~ ²³⁹³ ~~2394~~ ²³⁹⁵ ~~2396~~ ²³⁹⁷ ~~2398~~ ²³⁹⁹ ~~2400~~ ²⁴⁰¹ ~~2402~~ ²⁴⁰³ ~~2404~~ ²⁴⁰⁵ ~~2406~~ ²⁴⁰⁷ ~~2408~~ ²⁴⁰⁹ ~~2410~~ ²⁴¹¹ ~~2412~~ ²⁴¹³ ~~2414~~ ²⁴¹⁵ ~~2416~~ ²⁴¹⁷ ~~2418~~ ²⁴¹⁹ ~~2420~~ ²⁴²¹ ~~2422~~ ²⁴²³ ~~2424~~ ²⁴²⁵ ~~2426~~ ²⁴²⁷ ~~2428~~ ²⁴²⁹ ~~2430~~ ²⁴³¹ ~~2432~~ ²⁴³³ ~~2434~~ ²⁴³⁵ ~~2436~~ ²⁴³⁷ ~~2438~~ ²⁴³⁹ ~~2440~~ ²⁴⁴¹ ~~2442~~ ²⁴⁴³ ~~2444~~ ²⁴⁴⁵ ~~2446~~ ²⁴⁴⁷ ~~2448~~ ²⁴⁴⁹ ~~2450~~ ²⁴⁵¹ ~~2452~~ ²⁴⁵³ ~~2454~~ ²⁴⁵⁵ ~~2456~~ ²⁴⁵⁷ ~~2458~~ ²⁴⁵⁹ ~~2460~~ ²⁴⁶¹ ~~2462~~ ²⁴⁶³ ~~2464~~ ²⁴⁶⁵ ~~2466~~ ²⁴⁶⁷ ~~2468~~ ²⁴⁶⁹ ~~2470~~ ²⁴⁷¹ ~~2472~~ ²⁴⁷³ ~~2474~~ ²⁴⁷⁵ ~~2476~~ ²⁴⁷⁷ ~~2478~~ ²⁴⁷⁹ ~~2480~~ ²⁴⁸¹ ~~2482~~ ²⁴⁸³ ~~2484~~ ²⁴⁸⁵ ~~2486~~ ²⁴⁸⁷ ~~2488~~ ²⁴⁸⁹ ~~2490~~ ²⁴⁹¹ ~~2492~~ ²⁴⁹³ ~~2494~~ ²⁴⁹⁵ ~~2496~~ ²⁴⁹⁷ ~~2498~~ ²⁴⁹⁹ ~~2500~~ ²⁵⁰¹ ~~2502~~ ²⁵⁰³ ~~2504~~ ²⁵⁰⁵ ~~2506~~ ²⁵⁰⁷ ~~2508~~ ²⁵⁰⁹ ~~2510~~ ²⁵¹¹ ~~2512~~ ²⁵¹³ ~~2514~~ ²⁵¹⁵ ~~2516~~ ²⁵¹⁷ ~~2518~~ ²⁵¹⁹ ~~2520~~ ²⁵²¹ ~~2522~~ ²⁵²³ ~~2524~~ ²⁵²⁵ ~~2526~~ ²⁵²⁷ ~~2528~~ ²⁵²⁹ ~~2530~~ ²⁵³¹ ~~2532~~ ²⁵³³ ~~2534~~ ²⁵³⁵ ~~2536~~ ²⁵³⁷ ~~2538~~ ²⁵³⁹ ~~2540~~ ²⁵⁴¹ ~~2542~~ ²⁵⁴³ ~~2544~~ ²⁵⁴⁵ ~~2546~~ ²⁵⁴⁷ ~~2548~~ ²⁵⁴⁹ ~~2550~~ ²⁵⁵¹ ~~2552~~ ²⁵⁵³ ~~2554~~ ²⁵⁵⁵ ~~2556~~ ²⁵⁵⁷ ~~2558~~ ²⁵⁵⁹ ~~2560~~ ²⁵⁶¹ ~~2562~~ ²⁵⁶³ ~~2564~~ ²⁵⁶⁵ ~~2566~~ ²⁵⁶⁷ ~~2568~~ ²⁵⁶⁹ ~~2570~~ ²⁵⁷¹ ~~2572~~ ²⁵⁷³ ~~2574~~ ²⁵⁷⁵ ~~2576~~ ²⁵⁷⁷ ~~2578~~ ²⁵⁷⁹ ~~2580~~ ²⁵⁸¹ ~~2582~~ ²⁵⁸³ ~~2584~~ ²⁵⁸⁵ ~~2586~~ ²⁵⁸⁷ ~~2588~~ ²⁵⁸⁹ ~~2590~~ ²⁵⁹¹ ~~2592~~ ²⁵⁹³ ~~2594~~ ²⁵⁹⁵ ~~2596~~ ²⁵⁹⁷ ~~2598~~ ²⁵⁹⁹ ~~2600~~ ²⁶⁰¹ ~~2602~~ ²⁶⁰³ ~~2604~~ ²⁶⁰⁵ ~~2606~~ ²⁶⁰⁷ ~~2608~~ ²⁶⁰⁹ ~~2610~~ ²⁶¹¹ ~~2612~~ ²⁶¹³ ~~2614~~ ²⁶¹⁵ ~~2616~~ ²⁶¹⁷ ~~2618~~ ²⁶¹⁹ ~~2620~~ ²⁶²¹ ~~2622~~ ²⁶²³ ~~2624~~ ²⁶²⁵ ~~2626~~ ²⁶²⁷ ~~2628~~ ²⁶²⁹ ~~2630~~ ²⁶³¹ ~~2632~~ ²⁶³³ ~~2634~~ ²⁶³⁵ ~~2636~~ ²⁶³⁷ ~~2638~~ ²⁶³⁹ ~~2640~~ ²⁶⁴¹ ~~2642~~ ²⁶⁴³ ~~2644~~ ²⁶⁴⁵ ~~2646~~ ²⁶⁴⁷ ~~2648~~ ²⁶⁴⁹ ~~2650~~ ²⁶⁵¹ ~~2652~~ ²⁶⁵³ ~~2654~~ ²⁶⁵⁵ ~~2656~~ ²⁶⁵⁷ ~~2658~~ ²⁶⁵⁹ ~~2660~~ ²⁶⁶¹ ~~2662~~ ²⁶⁶³ ~~2664~~ ²⁶⁶⁵ ~~2666~~ ²⁶⁶⁷ ~~2668~~ ²⁶⁶⁹ ~~2670~~ ²⁶⁷¹ ~~2672~~ ²⁶⁷³ ~~2674~~ ²⁶⁷⁵ ~~2676~~ ²⁶⁷⁷ ~~2678~~ ²⁶⁷⁹ ~~2680~~ ²⁶⁸¹ ~~2682~~ ²⁶⁸³ ~~2684~~ ²⁶⁸⁵ ~~2686~~ ²⁶⁸⁷ ~~2688~~ ²⁶⁸⁹ ~~2690~~ ²⁶⁹¹ ~~2692~~ ²⁶⁹³ ~~2694~~ ²⁶⁹⁵ ~~2696~~ ²⁶⁹⁷ ~~2698~~ ²⁶⁹⁹ ~~2700~~ ²⁷⁰¹ ~~2702~~ ²⁷⁰³ ~~2704~~ ²⁷⁰⁵ ~~2706~~ ²⁷⁰⁷ ~~2708~~ ²⁷⁰⁹ ~~2710~~ ²⁷¹¹ ~~2712~~ ²⁷¹³ ~~2714~~ ²⁷¹⁵ ~~2716~~ ²⁷¹⁷ ~~2718~~ ²⁷¹⁹ ~~2720~~ ²⁷²¹ ~~2722~~ ²⁷²³ ~~2724~~ ²⁷²⁵ ~~2726~~ ²⁷²⁷ ~~2728~~ ²⁷²⁹ ~~2730~~ ²⁷³¹ ~~2732~~ ²⁷³³ ~~2734~~ ²⁷³⁵ ~~2736~~ ²⁷³⁷ ~~2738~~ ²⁷³⁹ ~~2740~~ ²⁷⁴¹ ~~2742~~ ²⁷⁴³ ~~2744~~ ²⁷⁴⁵ ~~2746~~ ²⁷⁴⁷ ~~2748~~ ²⁷⁴⁹ ~~2750~~ ²⁷⁵¹ ~~2752~~ ²⁷⁵³ ~~2754~~ ²⁷⁵⁵ ~~2756~~ ²⁷⁵⁷ ~~2758~~ ²⁷⁵⁹ ~~2760~~ ²⁷⁶¹ ~~2762~~ ²⁷⁶³ ~~2764~~ ²⁷⁶⁵ ~~2766~~ ²⁷⁶⁷ ~~2768~~ ²⁷⁶⁹ ~~2770~~ ²⁷⁷¹ ~~2772~~ ²⁷⁷³ ~~2774~~ ²⁷⁷⁵ ~~2776~~ ²⁷⁷⁷ ~~2778~~ ²⁷⁷⁹ ~~2780~~ ²⁷⁸¹ ~~2782~~ ²⁷⁸³ ~~2784~~ ²⁷⁸⁵ ~~2786~~ ²⁷⁸⁷ ~~2788~~ ²⁷⁸⁹ ~~2790~~ ²⁷⁹¹ ~~2792~~ ²⁷⁹³ ~~2794~~ ²⁷⁹⁵ ~~2796~~ ²⁷⁹⁷ ~~2798~~ ²⁷⁹⁹ ~~2800~~ ²⁸⁰¹ ~~2802~~ ²⁸⁰³ ~~2804~~ ²⁸⁰⁵ ~~2806~~ ²⁸⁰⁷ ~~2808~~ ²⁸⁰⁹ ~~2810~~ ²⁸¹¹ ~~2812~~ ²⁸¹³ ~~2814~~ ²⁸¹⁵ ~~2816~~ ²⁸¹⁷ ~~2818~~ ²⁸¹⁹ ~~2820~~ ²⁸²¹ ~~2822~~ ²⁸²³ ~~2824~~ ²⁸²⁵ ~~2826~~ ²⁸²⁷ ~~2828~~ ²⁸²⁹ ~~2830~~ ²⁸³¹ ~~2832~~ ²⁸³³ ~~2834~~ ²⁸³⁵ ~~2836~~ ²⁸³⁷ ~~2838~~ ²⁸³⁹ ~~2840~~ ²⁸⁴¹ ~~2842~~ ²⁸⁴³ ~~2844~~ ²⁸⁴⁵ ~~2846~~ ²⁸⁴⁷ ~~2848~~ ²⁸⁴⁹ ~~2850~~ ²⁸⁵¹ ~~2852~~ ²⁸⁵³ ~~2854~~ ²⁸⁵⁵ ~~2856~~ ²⁸⁵⁷ ~~2858~~ ²⁸⁵⁹ ~~2860~~ ²⁸⁶¹ ~~2862~~ ²⁸⁶³ ~~2864~~ ²⁸⁶⁵ ~~2866~~ ²⁸⁶⁷ ~~2868~~ ²⁸⁶⁹ ~~2870~~ ²⁸⁷¹ ~~2872~~ ²⁸⁷³ ~~2874~~ ²⁸⁷⁵ ~~2876~~ ²⁸⁷⁷ ~~2878~~ ²⁸⁷⁹ ~~2880~~ ²⁸⁸¹ ~~2882~~ ²⁸⁸³ ~~2884~~ ²⁸⁸⁵ ~~2886~~ ²⁸⁸⁷ ~~2888~~ ²⁸⁸⁹ ~~2890~~ ²⁸⁹¹ ~~2892~~ ²⁸⁹³ ~~2894~~ ²⁸⁹⁵ ~~2896~~ ²⁸⁹⁷ ~~2898~~ ²⁸⁹⁹ ~~2900~~ ²⁹⁰¹ ~~2902~~ ²⁹⁰³ ~~2904~~ ²⁹⁰⁵ ~~2906~~ ²⁹⁰⁷ ~~2908~~ ²⁹⁰⁹ ~~2910~~ ²⁹¹¹ ~~2912~~ ²⁹¹³ ~~2914~~ ²⁹¹⁵ ~~2916~~ ²⁹¹⁷ ~~2918~~ ²⁹¹⁹ ~~2920~~ ²⁹²¹ ~~2922~~ ²⁹²³ ~~2924~~ ²⁹²⁵ ~~2926~~ ²⁹²⁷ ~~2928~~ ²⁹²⁹ ~~2930~~ ²⁹³¹ ~~2932~~ ²⁹³³ ~~2934~~ ²⁹³⁵ ~~2936~~ ²⁹³⁷ ~~2938~~ ²⁹³⁹ ~~2940~~ ²⁹⁴¹ ~~2942~~ ²⁹⁴³ ~~2944~~ ²⁹⁴⁵ ~~2946~~ ²⁹⁴⁷ ~~2948~~ ²⁹⁴⁹ ~~2950~~ ²⁹⁵¹ ~~2952~~ ²⁹⁵³ ~~2954~~ ²⁹⁵⁵ ~~2956~~ ²⁹⁵⁷ ~~2958~~ ²⁹⁵⁹ ~~2960~~ ²⁹⁶¹ ~~2962~~ ²⁹⁶³ ~~2964~~ ²⁹⁶⁵ ~~2966~~ ²⁹⁶⁷ ~~2968~~ ²⁹⁶⁹ ~~2970~~ ²⁹⁷¹ ~~2972~~ ²⁹⁷³ ~~2974~~ ²⁹⁷⁵ ~~2976~~ ²⁹⁷⁷ ~~2978~~ ²⁹⁷⁹ ~~2980~~ ²⁹⁸¹ ~~2982~~ ²⁹⁸³ ~~2984~~ ²⁹⁸⁵ ~~2986~~ ²⁹⁸⁷ ~~2988~~ ²⁹⁸⁹ ~~2990~~ ²⁹⁹¹ ~~2992~~ ²⁹⁹³ ~~2994~~ ²⁹⁹⁵ ~~2996~~ ²⁹⁹⁷ ~~2998~~ ²⁹⁹⁹ ~~3000~~ ³⁰⁰¹ ~~3002~~ ³⁰⁰³ ~~3004~~ ³⁰⁰⁵ ~~3006~~ ³⁰⁰⁷ ~~3008~~ ³⁰⁰⁹ ~~3010~~ ³⁰¹¹ ~~3012~~ ³⁰¹³ ~~3014~~ ³⁰¹⁵ ~~3016~~ ³⁰¹⁷ ~~3018~~ ³⁰¹⁹ ~~3020~~ ³⁰²¹ ~~3022~~ ³⁰²³ ~~3024~~ ³⁰²⁵ ~~3026~~ ³⁰²⁷ ~~3028~~ ³⁰²⁹ ~~3030~~ ³⁰³¹ ~~3032~~ ³⁰³³ ~~3034~~ ³⁰³⁵ ~~3036~~ ³⁰³⁷ ~~3038~~ ³⁰³⁹ ~~3040~~ ³⁰⁴¹ ~~3042~~ ³⁰⁴³ ~~3044~~ ³⁰⁴⁵ ~~3046~~ ³⁰⁴⁷ ~~3048~~ ³⁰⁴⁹ ~~3050~~ ³⁰⁵¹ ~~3052~~ ³⁰⁵³ ~~3054~~ ³⁰⁵⁵ ~~3056~~ ³⁰⁵⁷ ~~3058~~ ³⁰⁵⁹ ~~3060~~ ³⁰⁶¹ ~~3062~~ ³⁰⁶³ ~~3064~~ ³⁰⁶⁵ ~~3066~~ ³⁰⁶⁷ ~~3068~~ ³⁰⁶⁹ ~~3070~~ ³⁰⁷¹ ~~3072~~ ³⁰⁷³ ~~3074~~ ³⁰⁷⁵ ~~3076~~ ³⁰⁷⁷ ~~3078~~ ³⁰⁷⁹ ~~3080~~ ³⁰⁸¹ ~~3082~~ ³⁰⁸³ ~~3084~~ ³⁰⁸⁵ ~~3086~~ ³⁰⁸⁷ ~~3088~~ ³⁰⁸⁹ ~~3090~~ ³⁰⁹¹ ~~3092~~ ³⁰⁹³ ~~3094~~ ³⁰⁹⁵ ~~3096~~ ³⁰⁹⁷ ~~3098~~ ³⁰⁹⁹ ~~3100~~ ³¹⁰¹ ~~3102~~ ³¹⁰³ ~~3104~~ ³¹⁰⁵ ~~3106~~ ³¹⁰⁷ ~~3108~~ ³¹⁰⁹ ~~3110~~ ³¹¹¹ ~~3112~~ ³¹¹³ ~~3114~~ ³¹¹⁵ ~~3116~~ ³¹¹⁷ ~~3118~~ ³¹¹⁹ ~~3120~~ ³¹²¹ ~~3122~~ ³¹²³ ~~3124~~ ³¹²⁵ ~~3126~~ ³¹²⁷ ~~3128~~ ³¹²⁹ ~~3130~~ ³¹³¹ ~~3132~~ ³¹³³ ~~3134~~ ³¹³⁵ ~~3136~~ ³¹³⁷ ~~3138~~ ³¹³⁹ ~~3140~~ ³¹⁴¹ ~~3142~~ ³¹⁴³ ~~3144~~ ³¹⁴⁵ ~~3146~~ ³¹⁴⁷ ~~3148~~ ³¹⁴⁹ ~~3150~~ ³¹⁵¹ ~~3152~~ ³¹⁵³ ~~3154~~ ³¹⁵⁵ ~~3156~~ ³¹⁵⁷ ~~3158~~ ³¹⁵⁹ ~~3160~~ ³¹⁶¹ ~~3162~~ ³¹⁶³ ~~3164~~ ³¹⁶⁵ ~~3166~~ ³¹⁶⁷ ~~3168~~ ³¹⁶⁹ ~~3170~~ ³¹⁷¹ ~~3172~~ ³¹⁷³ ~~3174~~ ³¹⁷⁵ ~~3176~~ ³¹⁷⁷ ~~3178~~ ³¹⁷⁹ ~~3180~~ ³¹⁸¹ ~~3182~~ ³¹⁸³ ~~3184~~